

# CALL FOR PAPERS

#### MATHEMATICAL GEOSCIENCES SPECIAL ISSUE ON

# Machine Learning-based Mapping for Mineral Exploration

#### **Guest Editors:**

Renguang Zuo (China University of Geosciences, China) John Carranza (University of the Free State, South Africa)

Mineral prospectivity mapping as a computer-based approach to delineate targeted areas for a specific type of mineral deposit has changed from being knowledge driven to data driven to today's big data analytics. There are increasing applications of machine learning algorithms in mapping mineral prospectivity and identifying geochemical anomalies association with mineralization. The proposed special issue will document case studies and current researchers demonstrating progress of machine learning-based mineral prospectivity mapping.

#### **Main topics:**

- Mineral prospectivity mapping by machine (deep) learning
- Geochemical anomaly mapping by machine (deep) learning
- Big data analytics for geochemical anomaly or mineral prospectivity mapping
- Numerical simulation for mineral exploration

#### **Timelines:**

A tentative title and an abstract (300–500 words) should be sent to the Guest Editors by **August 31**st, **2022**. Full manuscripts should respect the journal's guidelines for authors and be submitted online using the Editorial Manager system.

- Paper submission before: December 31st, 2022
- Return of reviews to authors before: March 31st, 2023
- Submission of final papers deadline: July 31st, 2023
- Publication: Late 2023

## **Submit Papers** online through the journal's website http://www.springer.com/journal/11004

When submitting, you must choose, under 'Select Article Type,' the SI: "Machine learning-based mapping for mineral exploration."

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